

## CUMBERLAND RIVER BASIN

03432376 HARPETH RIVER TRIB AT MT. HOPE ROAD AT FRANKLIN, TN

LOCATION.--Lat 35°55'39", long 86°52'30", Williamson County, Hydrologic Unit 05130204, on downstream side of culvert on Mt. Hope Road.

DRAINAGE AREA.--2.50 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2002 to September 2005 (discontinued).

GAGE.--Data logger.

REMARKS.--Records good except for estimated daily discharges and periods of backwater, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, gage height, 12.97 ft, Dec. 1, due to backwater from Harpeth River; minimum discharge, .29 ft<sup>3</sup>/s, Aug. 8, 11, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.83	4.6	e22	5.1	3.7	5.1	21	5.4	3.1	1.2	e0.99	2.7
2	0.78	4.0	12	5.2	4.4	4.7	10	4.7	2.0	1.1	e0.88	1.8
3	0.72	6.0	8.8	4.8	3.7	5.8	8.0	4.1	1.6	1.1	e0.77	1.4
4	0.88	5.5	7.6	4.3	3.4	4.7	6.9	3.8	1.4	1.0	e0.69	1.2
5	0.66	3.7	9.0	4.3	3.2	4.3	6.2	3.3	1.3	0.99	e0.61	1.1
6	0.74	3.4	13	5.8	3.2	5.0	13	3.2	1.3	0.96	e0.56	0.89
7	0.74	3.6	e52	24	4.7	4.1	18	2.8	1.2	0.96	e0.50	1.7
8	0.81	3.9	e16	e81	4.9	3.7	16	2.6	2.4	0.93	e0.47	1.2
9	0.80	3.4	e37	10	4.4	3.4	11	2.6	2.1	0.91	0.53	0.88
10	0.73	3.2	e17	9.4	4.2	3.4	8.6	2.4	1.5	0.89	0.43	0.76
11	0.65	3.3	14	9.8	3.7	3.1	7.5	2.0	2.9	7.2	0.40	0.68
12	6.7	2.9	11	7.9	3.4	3.2	6.8	1.8	9.5	4.7	0.39	0.60
13	2.4	2.7	10	16	5.2	3.0	7.0	1.7	4.3	7.3	0.43	0.54
14	1.9	2.8	8.7	11	4.6	2.4	6.2	2.1	2.9	10	0.37	0.53
15	1.6	3.0	7.9	8.8	4.0	2.4	5.3	1.9	2.2	11	4.4	8.7
16	1.4	2.3	7.4	7.7	3.7	2.8	4.6	1.7	1.9	7.6	10	1.9
17	1.5	2.2	6.7	7.1	3.4	2.3	4.4	1.7	1.7	5.7	12	1.2
18	6.0	2.0	5.8	6.5	3.2	2.2	4.0	1.6	1.6	5.0	6.3	0.99
19	e52	2.0	5.3	6.2	3.0	2.2	3.9	3.0	1.5	10	4.8	0.83
20	9.1	1.9	5.3	6.0	7.5	2.1	4.0	2.2	1.5	6.5	3.3	0.71
21	7.0	1.6	5.2	5.7	9.1	2.0	3.6	1.6	1.4	e2.4	2.4	0.71
22	5.8	1.6	21	5.1	8.6	3.9	6.7	1.5	1.4	e3.4	2.1	0.67
23	5.7	5.3	e84	4.6	7.5	e8.0	3.8	1.4	1.3	e2.4	1.9	0.70
24	4.8	21	12	4.6	6.8	e2.6	3.3	1.4	1.2	e1.8	1.6	0.64
25	4.0	7.5	9.9	4.4	5.6	e2.1	3.1	1.4	1.2	e1.6	5.0	7.6
26	4.0	6.8	8.7	3.9	4.9	e1.8	3.6	1.3	1.2	e1.4	3.9	3.6
27	5.9	6.9	7.8	3.7	4.6	e4.1	3.1	1.3	1.2	e3.8	3.4	1.6
28	4.9	5.7	6.8	3.6	6.8	e4.0	4.3	1.3	1.1	e2.0	4.5	1.3
29	4.3	5.8	6.6	5.9	---	e2.9	4.6	1.3	1.1	e1.5	5.6	1.2
30	4.1	e71	5.4	4.3	---	e2.9	10	1.3	1.1	e1.4	33	1.1
31	4.1	---	5.2	4.1	---	e9.5	---	1.3	---	e1.2	4.1	---
MEAN	4.69	6.65	14.5	9.38	4.84	3.67	7.28	2.25	2.00	3.48	3.75	1.65
MAX	52	71	84	81	9.1	9.5	21	5.4	9.5	11	33	8.7
MIN	0.65	1.6	5.2	3.6	3.0	1.8	3.1	1.3	1.1	0.89	0.37	0.53

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	3.58	4.84	8.44	5.99	8.44	5.39	5.01	6.02	3.98	2.55	2.10	2.73
MAX	4.69	6.65	14.5	9.38	15.6	7.68	7.28	11.4	7.42	3.48	3.75	4.78
(WY)	(2005)	(2005)	(2005)	(2005)	(2003)	(2004)	(2005)	(2003)	(2003)	(2005)	(2005)	(2003)
MIN	1.60	3.52	3.44	3.98	4.84	3.67	3.69	2.25	2.00	1.67	0.35	1.65
(WY)	(2004)	(2004)	(2004)	(2003)	(2005)	(2005)	(2004)	(2004)	(2005)	(2003)	(2002)	(2005)

## 03432376 HARPETH RIVER TRIB AT MT. HOPE ROAD AT FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2002 - 2005
ANNUAL MEAN	5.06	5.36	4.96
HIGHEST ANNUAL MEAN			5.91
LOWEST ANNUAL MEAN			3.60
HIGHEST DAILY MEAN	84	Dec 23	84
LOWEST DAILY MEAN	0.65	Oct 11	0.12
ANNUAL SEVEN-DAY MINIMUM	0.73	Oct 5	0.13
MAXIMUM PEAK STAGE		12.97	16.91
INSTANTANEOUS LOW FLOW		a0.29	b0.11
10 PERCENT EXCEEDS	8.9	9.6	9.0
50 PERCENT EXCEEDS	3.2	3.6	3.3
90 PERCENT EXCEEDS	1.0	0.89	1.2

a Also occurred Aug. 11, 14, 15.

b From high water mark in gage house, resulting from backwater from the Harpeth River.

e Estimated

